

https://dspace.org/

A retrospective study analysing mortality and outcomes in the paediatric burns intensive care unit at the Chris Hani Baragwanath Academic Hospital, Johannesburg

Mashavave, Noxolo Zekhethelo

2021

https://hdl.handle.net/10539/33725

Downloaded from a DSpace repository. https://dspace.org/

A retrospective study analysing mortality and outcomes in the paediatric burns intensive care unit at the Chris Hani Baragwanath Academic Hospital, Johannesburg

N Z Mashavave,1 MB ChB; **A Withers**,1 MB BCh; **L Doedens**,2 MB ChB, FCPaed (SA), Cert Crit Care (SA); **B Jugmohan**,1 MB ChB, FCS (SA), MMed Surg, Cert Gastro Surg (SA); **J Loveland**,1 MB ChB, FCS (SA), Cert Paed Surg (SA)

1 *Department of Paediatric Surgery, Chris Hani Baragwanath Academic Hospital and Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, South Africa*

2 *Department of Paediatric Critical Care, Chris Hani Baragwanath Academic Hospital and Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, South Africa*

Corresponding author: *N Z Mashavave (nzxaba@gmail.com)*

Background. Data on mortalities related to paediatric burns in South Africa are scarce and outcomes in transferred and direct admissions into paediatric intensive care units have not been compared.

Objectives. To describe the demographic profile, aetiology and extent of injuries in patients treated at the paediatric burns intensive care unit (PBICU) at the Chris Hani Baragwanath Academic Hospital (CHBAH), Johannesburg and to compare outcomes of direct admissions and patients transferred to the unit.

Methods. This was a retrospective cohort study of all patients younger than 10 years admitted to the PBICU at CHBAH from January 2013 to December 2017. Statistical differences between groups were analysed using log-rank analysis and Kaplan–Meier curves were used to determine survival.

Results. Of the 2 506 admissions into the general ward and ICU over the 5-year study period, 428 admissions were to the PBICU. A total of 109 deaths occurred (25.47% of PBICU admissions), with an overall mortality of 4.4%. Of the total number of deaths (n=109), 58 (53.21%) were among direct admissions and 51 (46.79%) among transferred patients. The mortality rate in the respective groups was 18.58% (direct admissions) and 43.97% (transferred patients). The survival rate was significantly different between the two groups (p<0.01).

Conclusion. A favourable outcome was more likely in direct admissions than in transferred patients. With standardised protocols for management of severe burns and stable availability of resources, improvements in outcome are expected.

S Afr J Child Health 2020;14(4):212-216. https://doi.org/10.7196/SAJCH.2020.v14i4.1724